

Attention to detail improves young stock performance

Track growth, meet targets

One Staffordshire-based unit has overhauled its young stock management system with considerable success. Improved nutrition has seen daily liveweight gains increase and age at first calving has fallen to 24 months.

text **Lauren Chambers**

Staffordshire-based producer James Brown has steadily expanded his milking herd, from 330 to 400 cows, during the past two years using home-bred heifers, in a bid to increase productivity and achieve greater economies of scale.

And he says that successful herd expansion has been, in part, the result of paying closer attention to heifer rearing and allowing more and better replacements to enter the herd.

During the past 18 months James has completely altered the unit's heifer rearing management regime – from feeding and housing, through to the way he manages and monitors young stock performance. "As we set about growing the herd we knew we needed more replacements," he explains.

"At the same time we wanted to reduce our losses and rear good quality heifers that would last for a long time in the milking herd. We knew that our current

performance wasn't where it needed to be, and that a change in emphasis was needed if we were going to get things right and improve our heifer rearing system." Recognising that heifer rearing is a specialised job and also vital to the continued and future success of his business – heifers are, after all, tomorrow's milkers – he began working with ForFarmers' regional young stock specialist, Rachael Kennerley, in September 2013.

Their first task was to establish the unit's current performance when it came to young stock rearing. Weighing showed that the calves were not achieving the required daily live weight gain (DLWG) targets that are needed to calve at two years old. The herd's average age at first calving was 28 months.

"We knew that our goal had to be to calve heifers at 24 months old," says James. "The evidence is clear that if you achieve good growth rates and calve at two years,



James Brown: "We had to improve heifer rearing in order to expand the herd"

the animal will last longer in the herd and perform better."

Monitoring performance

"We decided to take advantage of ForFarmers' heifer weighing service and switched to its range of young stock feeds to really concentrate on getting growth rates off to a good start," says James.

Weight recording showed that the herd was missing essential DLWG targets in the first three months, particularly during the first two weeks of life. This is a critical point where essential rumen development takes place. To remedy this, Rachael switched the calf milk replacer to a higher protein, whey-based product, and added specialist calf starter pellets to encourage rumen development. Once weaned the calves move to a straw-based diet with a high-protein heifer rearing compound.

Roundhouse revolution: young stock is thriving in the new building, which offers good handling facilities and easy access for mucking out



feeding regime	
colostrum	four litres within first six hours
milk replacer	two x three-litre feeds (15% concentration)
calf starter pellets	wean when calves are consuming 2kg/day
straw and concentrate (between three and 11 months)	4kg concentrate + ad-lib straw
haylage and concentrate (between 12 and 22 months)	2kg concentrate + ad-lib haylage

Table 1: Lower Barton's young stock feeding protocol

age	average DLWG	
	September 2013	February 2015
zero to two weeks	0.48kg	0.71kg
zero to eight weeks	0.55kg	0.7kg
zero to 12 weeks	0.74kg	0.8kg

Table 2: Lower Barton's DLWG performance

The change in the feed regime and the focus on performance through regular weighing has had the desired effect. "The calves get off to a much better start and we have seen average DLWG in the first two weeks from birth move from 0.48kg in September 2013, to 0.71kg in February this year," says Rachael.

James now aims to serve heifers at 13.5 months of age, to allow those that don't get in calf first time to be served a second time if needed and still calve at 24 months old. "The target weight at service is 385kg, which he is now achieving consistently across the herd and meeting the all-important age of 24 months at first calving."

These improvements represent some significant cost savings for James. Reducing age at first calving from 28 to 24 months equates to a saving of £90 per month, which is worth £360 for every heifer that calves earlier. In addition to this, the DLWG improvements also have a financial benefit. Research states that every 100g increase in DLWG, between 10

and 65 days old, is worth 250 litres of milk in a heifer's first lactation. Based on the improved DLWG performance in Table 2, heifers are achieving an extra 375 litres of milk, which is worth £93.75 per cow. Based on rearing 90 replacements per year, the improvements James has made could be worth up to £40,000 per year.

Better housing

Nutrition wasn't the only change made to James' heifer rearing programme. Housing has also come under scrutiny. Calves and heifers had been housed across the unit in hutches and other available buildings. But this presented problems in managing the groups and giving the young stock the attention they required.

"We knew our calf and heifer housing could be improved," says James. "We initially considered poly tunnels as a potential solution, but we didn't think this provided us with enough flexibility for housing older calves."

After visiting a unit with a new Roundhouse building, and being impressed by what he saw, he decided that this would be the ideal option for his herd.

"The handling facilities in the Roundhouse are excellent and have really been a revelation in the way we manage our calves," he says. "The ease with which we can now manage and handle groups of calves is ideal, making it a very safe environment for both the animals and staff."

Good hygiene

The building has several advantages compared to more traditional sheds. These include easy access for mucking out, which helps to maintain good hygiene standards on the unit, and the 360° view also means visibility is much better. James has clear sight of all the animals and can identify any problems easily and quickly. The building is also completely portable so, should the need arise, he can relocate the Roundhouse to a different part of the farm.

Ventilation in the new building is also excellent and James has noticed a reduction in incidence of pneumonia among his calves and young stock since he began using the building.

All the unit's young stock live in the Roundhouse from between five and six months of age, through to 24 months of age. James has also changed the position of his calf hutches, which are now grouped together and in closer proximity to the farmhouse, making them easier to manage.

"We are now much more aware and focussed on what we need to do to optimise calf and heifer rearing management," he says. "We are weighing young stock every three to four months, consistently, so we have good evidence of our performance and can quickly identify and rectify any issues."

"The combination of the suitable housing, the right feed and good management mean that we are hitting the all important growth targets for the calves. Overall young stock health is excellent and we are expanding our herd with good, strong heifers that will continue to do well."

James' aspirations for the unit are to maintain a strong focus on rearing better quality heifers to replace the older cows in the herd, and to allow continued growth at a steady pace. He is also pushing for complete A2-milk status among the herd and this will be an area for greater focus in the future. |

Handy hutches: calf housing is positioned much closer to the main farmhouse

